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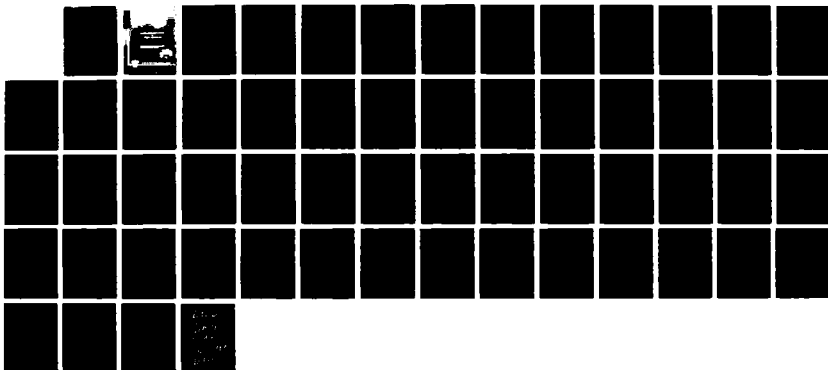
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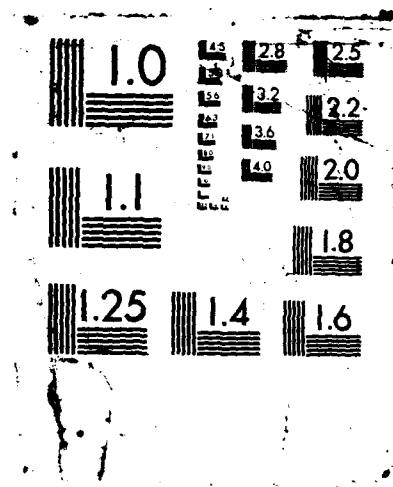
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THE ARMY WANTS MORE FAMILY PHYSICIANS  
AN INDIVIDUAL STUDY PROJECT

by

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## ABSTRACT

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## THE ARMY WANTS MORE FAMILY PHYSICIANS

### CHAPTER I

#### INTRODUCTION

Upon assuming his position as The Surgeon General (TSG) in 1983, Lieutenant General Quinn H. Becker began formulating his plan to rebuild the Army Medical Department (AMEDD). By May of that year he presented the Army Medical Enhancement Plan (AMEP) to the Army Chief of Staff (CSA). The AMEP called for improved patient appointment and management systems, health care quality assurance initiatives, increased support personnel, and a primary care goal of providing all active duty service members and their families with their own physician.<sup>1</sup> A radical departure from the way the AMEDD had operated, this final goal required an increase in AMEDD endstrength! This paper will describe the impact of the AMEP initiative on the Army's capability to fight and carry out its peacetime mission. It will also describe the Army's effort to keep on the forefront of medical technology and cost containment developments. Finally, it will serve to defend the program from impending budget cuts. The paper should stimulate further debate in the AMEDD on the role of medical services in today's Army. Overall, it will review the Surgeon General's rationale for AMEP and the reasons that the CSA was willing to commit new endstrength to the program at a time when he was scouring every TO&E and TDA organization for authorizations to build his new light divisions.

## BACKGROUND

TSG believed that the AMEDD's delivery system was out of balance. It was significantly weighted toward tertiary care, i.e. subspecialty Medical Center (MEDCEN) care, at the expense of Primary Care. This situation had not occurred by accident. During the drawdown following the Vietnam conflict, AMEDD authorizations decreased along with the rest of the Army's. The Berry Plan (deferring medical students from the draft while they were in medical training, but then calling them to active duty upon completion or cessation of that training) was also terminated. So the pipeline virtually dried up. Physician endstrength plummeted--decreasing from over 7,000 to slightly more than 3,000.

LTG. Pixley, Surgeon General at that time, decided to save the AMEDD'S residency training programs, which were located primarily at MEDCENs. He had the vision to see that, once lost, they would very likely never be replaced, since all residency programs in the U.S. are controlled by civilian specialty boards through the American Medical Association or American Osteopathic Association. He also realized that if the faculty were lost (many were of national prominence and some of world stature), it would take at least a generation to replace them. This strategy thus saved the training programs. It was doubly successful, since these programs also served as the major enticement available for recruitment of physicians. It offered them the opportunity upon entering the Army to enter or compete to enter high quality residency training and finance the process with payback time rather than cold hard cash. Elevation of the MEDCEN residency programs to first priority severely decreased clinical staff; ambulatory care suffered the most.

The patient population was also undergoing a dramatic increase, because the Army was serving more and more family members, retirees and retiree family members. The physician shortfall was most acute at clinic and MEDDAC (Medical Department Activity) level, although MEDCENs also had more work than they could handle. To reduce the impact of the physician shortages, the Army developed a program to use Physician Assistants (PAs) at battalion level.

Due to the outstanding quality of the students in the first P.A. classes at Fort Sam Houston, the effort was an outstanding success. Many of these students had been medical corpsmen in the Army for 5-10 years; they liked it and wanted to continue to be a part of it. Also, the program afforded them the opportunity to gain professional status which was not available to them anywhere else. They stood out even more because the young physicians whom they were replacing and the few that were still present as Brigade Surgeons definitely did not want to be there. These physicians didn't want to be in the Army, much less to serve in a line unit running sickcall while their medical school classmates were getting ahead of them in their residencies. It didn't help that they were assigned to those line positions directly from internships with little or no military training.

During this timeframe only the most seriously ill or the most persistent patients received care. Appointments were few and far between--generally unavailable. Lines stretched from here to eternity. The patients began to feel like cattle being herded here and there. The first problem was lack of resources. Then individual doctors, nurses, and corpsmen just gave up in the face of overwhelming numbers. The situation became so critical that waiting times became a defacto method of regulating demand--the longer the wait, the more people would give up and go out on CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) or

self-treat on over-the-counter medications or just do without. Good service, or at least courteous service, from any one individual or small group ensured an even greater crush of patients from other clinics, other facilities, CHAMPUS, or selfcare. So even proficiency was crushed by an overwhelming demand for medical services. These were terrible times (1973-1980), not only for patients and their families, but for all medical personnel. People do not choose to go into the medical profession to make people unhappy or to treat them like cattle. They want to help people, to show compassion toward them, to empathize with them, and to go the extra mile for them. This conflict of interests--compassion versus personal survival--produced a period of terrible morale.

Public relations were obviously terrible. The AMEDD could seemingly do nothing right. The Army media and the civilian press both carried one horror story after another. Fortunately, after the draft ended, Congress had passed the Health Profession Scholarship Program (HPSP), which was essentially a scholarship program offering medical school tuition, an allowance, and a Lieutenant's salary in exchange for a year-per-year active duty obligation. So by the late 1970s a trickle of these new resources began to enter the system. At least the situation seemed to be turning itself around. If these young doctors could not immediately make real changes in resources to do the job, they at least brought good attitudes. They didn't have a chip on their shoulders, as the Berry Planners did. They had chosen to accept the scholarship for value received rather than as a mechanism to stay out of Vietnam. However, they were still untrained and unprepared for Army life. Even worse, the AMEDD's layer of middle management had been decimated. All that remained were individuals doing the best that they could within a broken system.

At first a majority of the new HPSP resources went to Medical Centers. There were several reasons for this: the residency programs had been passing their accreditation by the skin of their teeth; they were accredited by civilian boards who explicitly spelled out the requirements; people wanted to work in the best environment possible; almost all of the young physicians wanted to be in training programs; and no one would willingly go into a clinic or MEDDAC situation as described above. New residency graduates and staff felt the same way. The way of escape, to stay out of the clinics and MEDDACs, was to be accepted as faculty at a MEDCEN or to go into a subspecialty fellowship there. All of the internal pressure was therefore favoring the MEDCENs.

Still no one was acting as advocate for the masses, although the Acute Minor Illness Clinic (AMIC) and Emergency Room (ER) continued to serve as the pressure relief valve for the individual hospital and the system. These two entries into the system came to be regarded as battlefields by patients and provider alike. The patients faced incredibly long waits in crowded areas that were designed to handle only a fraction of the volume. Then they were treated by physicians who hated being where they were and hated doing what they were doing.

Four types of physicians staffed AMICs and ERs. The first were actually assigned to the area and were usually General Medical Officers (intern-trained without a specialty board). They were there because they had not been selected for the residency of their choice or because they needed a year's operational tour as a prerequisite to qualify for residency. The second group were staff from other specialty clinics within the hospital. They served on rotating rosters for night and weekend duty. This reduced their clinics' workload and efficiency, drove up CHAMPUS referral costs disproportionately, placed physicians in areas outside of

their expertise, and created additional intense morale problems. A third group were physicians who were assigned to Table of Organization and Equipment (TO&E) units as Brigade or Flight Surgeons, and then pulled call on the various rosters. The last group were Board Certified Physicians who had been decedentialed in their speciality area and couldn't work anywhere else .

On another front, the Academy of Health Sciences (AHS) reviewed the structure and doctrine of the AMEDD from top to bottom in the System Program Review (SPR) process. Their analysis of the TO&E clearly revealed that the most dramatic benefits to the Army for improved medical services were available in the Return-To-Duty (RTD) depositions. They also wanted to institute a dual track evacuation system of RTDs to Combat Support Hospitals (CSH) and Evacuees to the Evacuation Hospitals (EVAC).<sup>2</sup> Both of these initiatives required physicians with greater capabilities than those of the current General Medical Officers (GMOs). The Family Physician fit the new requirements.

There was one other factor in the equation. In 1972 the Army, following the civilian lead, made the decision to improve primary or ambulatory care by training Family Practice physicians. They did this by recruiting civilian Family Physicians as faculty and opening 6 residency programs. Four were at MEDDACs (Fts. Belvoir, Bragg, Benning, and Ord), and three MEDCENs (Eisenhower, Madigan and Tripler) also received programs. Initially, the impact from these programs was spotty at best. There were only a few Family Physicians, and only small groups were assigned at any given location. So they empaneled their patients by only providing care to those patients who enrolled in their clinic. This strategy provided self-defense against the overwhelming numbers. It also ensured that only a small group of patients benefited, creating "have" and "have not" populations. This

additional conflict and the long residency development time clouded the Army's original vision for Family Practice. Internal AMEDD resistance to change and competition among the specialties for resources blurred the vision further. Therefore, adequate resources were not provided to implement Family Practice services Armywide.

By the early 1980's a fortuitous circumstance occurred. The original civilian chiefs of Family Practice residencies retired, and they were replaced with Family Physicians who had field experience. Most had served as Division Surgeons, although some were West Point graduates or clinic commanders. Those who went to the Division Surgeon positions did so because they wanted to. They really stood out--even if they were junior in rank and ill-prepared. Their medical expertise coupled with their enthusiasm and willingness to work enabled them to quickly overcome their inexperience. Their success produced outstanding Officer Efficiency Reports (OERs) in comparison to their MEDDAC and MEDCEN colleagues. Logically, then, they were in a position to be assigned as residency chiefs. Such recognition and opportunity for a physician with TO&E experience rather than academic experience was unusual, and it was unique to Family Practice on such a large scale. The other specialties had long traditions at MEDCENs, where the aura of academia was reenforced by the mass of other residencies and association with civilian university medical centers. The older MEDCEN specialties therefore had a large pool of academicians waiting in line for these prestigious positions and few specialists with TO&E experience gained acceptance. But the influx of new field-trained Family Physicians dramatically altered a long standing pattern of academic residencies.

This new breed of Family Practice residency chief profoundly influenced attitudes within their speciality. Now it was not only acceptable to go to clinics or MEDDACs or line positions, but these became preferred career paths. Now young Family Physicians were more willing to practice away from a hospital setting. They sought clinic assignments in Germany as Officer In Charge (OIC) or Clinic Commander. Since there were essentially no retirees there to overwhelm the system, these young physicians actually had a fighting chance to succeed in the practice of military medicine. The overwhelming majority accepted the challenge enthusiastically, especially since their families could be with them on accompanied tours. These first experiments were overwhelmingly successful and Europe pressed hard for more. By recruiting residency faculty from the group with this experience, the die was cast. Family Physicians began to look out from behind their tightly empaneled hospital practices and began to devise plans to care for the rest of the Army. They were ready to accept the challenge of being an advocate for the masses.

This ten year period (1973 to 1983) had produced several generations of Army leadership. They had seen only the worst from the AMEDD. Unless an officer had been literally saved while in Vietnam or he or a member of his family had had a major illness successfully treated, he generally ranked the AMEDD very low. On top of everything else, the long period of marginal care and an emerging litigious environment in the civilian sector was spilling over into the military. Now the military medical system faced significant malpractice claims.

From this morass, the new TSG proposed the The Army Medical Enhancement Plan with its Primary Care focus. The plan would restore the patient/doctor relationship by assigning a physician to active duty families by unit. It would increase support personnel to a level more in line with industry norms for

increased efficiency.<sup>3</sup> It would increase Family Practice and hence AMEDD active duty endstrength by 285, and it would convert a majority of Army GMO authorizations to Family Practice<sup>4</sup> (see appendix 1). This increased both peacetime efficiency and wartime capability. It offered a program to improve courtesy throughout the AMEDD, a continued push in quality assurance, and improved patient appointment and management systems. The unspoken objective was to salvage the AMEDD's reputation and save the Corps from budget cuts and decreases in endstrength, which would lead to more civilianization. The CSA concurred with the objectives. He was willing to pay the price in endstrength and POM budget resources.

#### ENDNOTES

1. Quinn H. Becker, LTG. Memorandum of The Surgeon General to the Medical Corps General Officers on the AMEDD Goals and Objectives, p. 1.

2. Combat support hospitals (CSH) and Evacuation (EVAC) hospitals are corps assets in support of a division. The General hospital (GH), a Communication Zone asset, is the largest Army medical treatment facility within the theater. It provides further treatment to stabilize those patients requiring evacuation to CONUS. U.S. Department of the Army, Field Manual 8-35: Planning for Health Service Support. TRADOC: February 1985.

3. Edward J. Huycke, MG. Memorandum of the Acting The Surgeon General for the Office of the Surgeon General Staff on the Army Medical Enhancement Program, p. 1.

4. S.R. Woods, MG. Memorandum of the Director, Program Analysis and Evaluation for the Surgeon General on Taskers Resulting from CSA Brief-Army Medical Enhancement Program, p. 1.

## CHAPTER II

### TRAINING DIFFERENCES

There are significant differences between a General Medical Officer (GMO) and a Family Physician. The most obvious is the fact that a GMO has had only a one year Internship following graduation from medical school. On the other hand, the Family Physician has served a three year residency like other primary care specialists in Internal Medicine, Pediatrics, or Emergency Medicine. This added time in training provides more maturity, variety, depth, and experience--all of which equates to improved readiness for the Army.

### GENERAL MEDICAL OFFICERS

In the U.S., graduating medical students go directly into one-year internships (no states now allow medical school graduates to take their licensing examinations without an internship).<sup>1</sup> Internships may be general in nature (called Rotating, Flexible, or Transitional), thus providing exposure and training in a wide breadth of specialties. Otherwise, they are called Categorical Internships, which means that they are focused on a particular specialty field. Although the trend in the recent past has been toward tighter specialization--more Categorical Internships--there is now a growing realization of the importance of a broad-based internship. Several specialties have reverted to requiring a Transitional Internship prior to residency selection.

Lack of a uniform policy among specialties has created difficult problems for the AMEDD. Only about one half of the yearly graduating interns in the Army are completing Transitional Internships.<sup>2</sup> The remaining 40-50% are from Categorical

Internships, such as surgery. If a Categorical Intern is not selected to continue in residency training, he must begin paying back his obligation as a GMO. Almost all GMO requirements are in Primary Care, where a broad-based knowledge is essential. Therefore, when a Categorical Intern, who doesn't have the broad knowledge base, is placed at a remote site--whether in Europe, Korea, or the U.S.--there is an increased requirement for consultation, which means more medical evacuations. For example, a surgical intern may exhibit superior skills in the workup of an acute abdomen, if adequate laboratory support is available, but still be deficient in pediatric, general medicine, and obstetrical care.

In addition to these problems, young GMOs lack military knowledge. To overcome these shortfalls and other general readiness problems, all three services have developed a one-week Combat Care Casualty Course (C4), where Advanced Trauma Life Support skills are taught along with triage and evacuation in a field environment.

#### FAMILY PHYSICIANS

The first year in Family Practice is like a true Transitional Internship in that a broad base of experience is established. Family Practice residents typically spend two months in Surgery, Medicine, Pediatrics, and Obstetrics/Gynecology, plus one month in Orthopedics, Intensive Care Unit, Emergency Medicine, and Radiology/Anesthesiology. From this broad base, along with responsibility for a panel of patients to learn continuity of care, the Family Practice resident spends another two years delving deeper into the basic core areas. He also works in subspecialty areas such as Ophthalmology, Otolaryngology, Rheumatology, Dermatology, Gastroenterology, Pulmonology, Cardiology, Urology, Neurology,

Psychology, Podiatry, and Preventive Medicine.<sup>3</sup> The Army Family Physician also spends time during the third year in Troop Medical Clinics (TMCs)--not just in Sickcall, but learning how to manage a clinic. He learns the subtleties of budget, supply, personnel, unit relations, and Army administration in a living environment.

#### ENDNOTES

1. Interview with Michael J. Scotti Jr., Col., U.S. Office of the Surgeon General of the Army, Washington D.C., 8 February 1988.

2. Interview with Deloris Pfeiffer, U.S. Office of the Surgeon General of the Army, Washington D.C., 8 February 1988.

3. American Medical Association, The Directory of Residency Training Programs, p. 23.

## CHAPTER III

### IMPACT OF FAMILY PHYSICIAN GO-TO-WAR SKILLS ON THE AMEDD

It is obvious that the training process that leads to Board Certification produces a more broadly based and technically proficient physician. He is also more "quantifiable", because he has taken the Board Certification examination of the speciality. This chapter will show how these physicians have impacted the Army and how they fit in to mobilization plans.

#### PROVIDE EARLY MOBILIZATION CAPABILITY

The CONUS (Continental United States) health care structure is designed to provide for wartime readiness; it is then modified to accomplish its peacetime missions and to provide early-on theater medical assets. Hence the slogan, DESIGN FOR WAR - MODIFY FOR PEACE. These CONUS resources also provide support to the mobilizing and training base and constitute a ready source of trained medical assets should they be needed for deployment to a theater of operations.<sup>1</sup> During the mobilization turmoil, the administrative and primary care skills of the Family Physician will be required for both the deploying field units and the mass of mobilizing forces.

#### Active Component

The Active Component fills early TO&E unit mobilization requirements, because deploying active duty units should be moving prior to actual declaration of Mobilization Day (M-Day). At the present time, there are only a very few medical personnel and even fewer units within the 200,000 troops that the President is

allowed to call up before actual M-Day.<sup>2</sup> Therefore, from a practical point of view the Reserve will not be available during this critical time period!

### Reserve Component

Following mobilization, the Reserve Component provides backfill for table of distribution and allowance (TDA) units to maintain current operational capabilities. They also support the late deploying TO&E units. 74% of the Army's hospitals are in the Reserve Components. There are 11 hospitals in the Army National Guard and 63 in the Army Reserve. Of the nonhospital units (Medical Units, Other), 64% are in the Reserve. Twenty-four are in the Army National Guard, and forty are in the Army Reserve.<sup>3</sup>

### INCREASE FOXHOLE STRENGTH

Surgeons are necessary for most of the definitive care of Battle Injury (BI) or Wounded In Action (WIA) patients (see appendix 2). However, many of these patients will be evacuated out of the theater and will never make it back to the theater unless it is a long war. Therefore primary care physicians help maintain the foxhole strength. They do so by increasing Return To Duty rates, increasing survival rates, and improving evacuation capability.

### Increase Return To Duty

Disease casualties of World War II, the Korean, Lebanese, and Vietnam conflicts totaled 15,828,940, while combat casualties numbered 640,254 (25:1 ratio).<sup>4</sup> From this group it is technically feasible to RTD the greatest number of patients. The AMEDD must RTD the maximum number of trained combat soldiers at the lowest possible unit level if the Army is to succeed in battle or sustained combat.<sup>5</sup> Only

this process can provide a seasoned manpower pool to meet personnel requirements until the reserves arrive, the draft is instituted, and the training base graduates its first class.<sup>6</sup> The most optimistic projections for the first draft replacements to arrive in the field is approximately 113 days. Even after the nation is fully mobilized, the medical RTD capability is still the most efficient process for retaining trained manpower in the unit.

Table 1 presents another view of casualty projections. It indicates the estimated hospital admission rates for several geographical areas based on evidence from World War II, the Korean conflict, the Vietnam experience, and subsequent study of the world health situation. Each rate represents a first-year experience typical of the area involved. The important point is that Disease and Non-Battle Injuries (DNBI) still account for the majority of casualties, even of hospitalized patients.<sup>7</sup>

Table 1. Rate of admissions to hospitals per 1,000 strengths per day

Area	Disease and non-battle injuries	Wounded in action
North America.....	1.36	0.55
Europe.....	1.62	0.55
Northeast Asia.....	2.07	0.37
Southeast Asia.....	0.60	0.20
Africa.....	2.87	0.37
Middle East.....	1.96	0.37
South America.....	1.72	0.37

Another data base substantiates this pattern for Low Intensity Conflicts (LICs). The comparison of causes of admission of active-duty Army patients to U.S. Army

medical facilities in Vietnam in 1967 demonstrates that disease=70.6%, and nonbattle injury=13.8%, so only 15.6% are admitted for battle casualty.<sup>8</sup>

The new Health Service Support Doctrine forcefully addresses the RTD issue:

the treatment squad and treatment platoon provide a major source of RTD personnel for the tactical commander. The treatment squad is composed of a physician, a physicians' assistant, medical NCOs, medical specialists, and medical equipment sets (MES). Some of the skills required at this level include patient assessment, insertion of breathing tubes, prevention and treatment of shock, body fluid replacement, emergency trauma treatment, and initial treatment of burns. The treatment squad operates with the medical platoon of the maneuver battalion and with the medical company of the division medical battalion. In the heavy division and motorized infantry division, the squad is in the forward support battalion and main support battalion. It operates the unit level medical treatment facility.<sup>9</sup>

At the division level, the treatment platoon provides a patient-holding capability plus auxilliary services, such as dental treatment, and laboratory and radiography capabilities. It can hold patients that are expected to be returned to duty for up to 72 hours or hold patients awaiting further evacuation. With treatment and evacuation elements positioned as far forward as is tactically feasible, early care is available to decrease death and reduce medical complications.<sup>10</sup>

Forward-oriented support [from a Board Certified Family Physician] decreases complications shortly after on-set of illness, injury, or battle fatigue and allows soldiers to return to duty without being evacuated rearward to receive the initial treatment.<sup>11</sup>

The cheapest way to increase RTDs is to prevent medical problems by improving our Preventive medicine capabilities. Dedicated Preventive medicine resources are available in the Division Surgeon Section. However, its small staff confronts medical threats capable of producing hundreds of casualties through injuries and illnesses. The complexity and breadth of these non-Wounded In Action (WIA) threats can be seen through review of six sample categories:

heat injuries caused by combinations of heat stress and insufficient water consumption; cold injuries caused by combinations of low temperatures, wind, and wetness; diseases caused by biting insects; diarrheal diseases caused by drinking impure water, eating contaminated foods, or not practicing good individual and unit preventive medicine measures; diseases,

trauma, or injuries caused by physical or mental unfitness; and environmental or occupational injuries caused by carbon monoxide, noise, blast over-pressure, and solvents.<sup>11</sup>

Examples of how medical threats such as these have destroyed the ability of an army to project combat power are found in virtually every military campaign and exercise in history. During the Vietnam War, between 1964 and 1973, nearly 50% of the troops deployed had at least one significant bout with diarrhea during their first 4 months in country. In the 1967 Sinai Campaign, 20% of the Egyptians deployed across the Peninsula died from heat, even though the war only lasted a few days. Forty percent of Israeli infantry units operating within the ancient city during the Jerusalem Campaign in 1967 contracted the festering sores of cutaneous leishmaniasis. During the Canal Clearance Operation in 1975, eighty percent of the Navy personnel deployed to Egypt suffered diarrhea and dysentery. Thirty percent of a U.S. airborne company was incapacitated by the Sinai heat, to the extent that I.V. fluids were required to reverse dehydration during the Peacekeeping Operations of 1982.<sup>12</sup>

So it is evident that the impact of the medical threat is often expressed in double-digit percentages that significantly affect an army's ability to fight and win. Heat, cold, injury, and disease are impartial. They strike generals and privates, and they affect friendly and hostile forces with equal ferocity.<sup>13</sup>

A GMO does not have the training and experience to be effective when confronted with this range of medical problems. A Family Physician does.

The Treatment Briefs Quad-Service Clinical Data Base of July 1, 1987, which is a recent revision of the Army's 309 Wartime Hospital Diagnoses, lists approximately 77 Orthopedic diagnoses.<sup>14</sup> Of these conditions, 19 (or 25%) represent large numbers of injuries that could be treated on an outpatient basis or at the Holding Company level if the technical expertise were available. Almost all of the patients with these conditions are now evacuated back to Division Hospital level for orthopedic care. This significant loss of trained manpower from the unit is unnecessary. The strains, sprains, dislocations, and simple fractures are being treated today by Family Physicians in a much more exacting and intense medicolegal environment. Their credentials provide the privileges that allow them to carry out this kind of practice. They can therefore maintain their expertise.

They are also qualified to supervise the training of their unit medics and physician assistants.

The residency trained Family Physician also has the training and experience to diagnose and care for patients with many of the infectious diseases that our troops may acquire, including many of the tropical diseases. When theater policy and protocols are formulated and available, more patients will fall into this category. Unless properly qualified physicians are placed forward, hundreds of patients with Fevers of Unknown Origin (FUOs) will be evacuated back to division level hospitals (CSH & EVAC) for diagnosis and treatment. Not many patients will be sent back to the front immediately after a diagnosis is made, even if RTD is technically acceptable. This paradox will occur because CSH and EVAC specialty physicians will lack the confidence to send forward technically qualified RTDs if only GMO expertise is available near the front. However, most of these patients could be treated in the foxhole (or clearing company at worse), if timely diagnosis and treatment is offered. It's what's up front that counts!

#### Increase Survival Rates

The AMEDD can increase survival rates for both DNBI and WIA patient categories. The way to reduce mortality and morbidity for DNBI patients is through the application of improved diagnostic skills at the lowest possible level for either treatment or referral. On the other hand, WIA patients require the best possible resuscitation and stabilization practices at the lowest possible level in preparation for evacuation.

Civilian experience during the past 30 years in addressing similar problems provides a useful model for the Army. Their research hospitals (university trauma

centers) first developed new shock trauma techniques which were then disseminated to all hospitals. After this knowledge was fully implemented at hospital level, mortality and morbidity were significantly improved. However, salvageable patients were still dying. So it became obvious that resources could be most effectively spent not by pouring more money into hospitals, but into prehospital care. Thus, in the 1960s & 70s, the civilians developed the paramedic system along with the Advanced Trauma Life Support training courses for physicians. Then they were able to improve survival rates by keeping patients alive long enough to reach the sophisticated inpatient facilities. That effort was clearly successful.

The civilian sector surged ahead of the military with new doctrine, new training, new equipment, and new procedures. Their capability to clear their "battlefield" was much superior to ours. They were able to increase the level of training of the medical personnel in their ambulances; however, physicians were still leading their ambulance teams while doctrine, techniques, and science were developing. This physician manning proved too expensive for wide national dissemination. Communication capabilities were then developed that tied the ambulances to centers manned with expert physicians and thus allowed the physician to be removed from the ambulance.

The civilian communication capability will not be available to us on the battlefield. However, by putting the more experienced and trained physician at the lowest level, the Army can improve the current situation with respect to prehospital care physician capabilities. The Army also needs readily available consultation for its PAs and corpsmen, and a local expert for unit training. Board Certified physicians resolve an increasingly serious legal problem; they provide the required expertise

and hold credentials and have privileges to cover the medicolegal aspects of each diagnosis, procedure, and therapy. While this is not an issue in major wars, it has become an issue in "small wars" or actions such as Granada. However, it is most important during peacetime--not only in the actual delivery of care, but also in maintaining the required level of training.

The Army does not have any significant additional capability in physician extenders, because they are already serving at the highest level of independent practice that is acceptable from the medicolegal standpoint. GMOs can and are being given ATLS training to improve their capability. However, most Interns do not have the opportunity to gain enough experience to develop acceptable proficiency. Therefore they don't have the expertise to train others. Currently the nation's hospitals just do not offer enough patients to train the numbers of interns and residents who require it.

The only cost effective and socially acceptable way to teach and maintain medical skills is through appropriately approved sanctioning and credentialing bodies. In the U.S. the civilian speciality boards provide this structure. The Board Certified Family Physician does have the capability to train and supervise the combat medics.

During peacetime they can work configured in wartime teams performing and improving their required skills. Treatment teams from the maneuver battalion's medical platoons can conduct sick call at a battalion aid station. After sick call, the treatment teams can move to the troop medical clinic (TMC) to help treat patients referred from the battalion aid station. At the conclusion of morning sick call, the troop medical clinic can then become a family practice clinic, providing medical care to family members of the brigade.<sup>15</sup>

In order to improve our Resuscitation Capability, rapid assessment and resuscitative skills are required. Both are necessary if mortality and morbidity in

trauma patients is to be reduced. Effective and timely emergency medical treatment administered at the site of injury or illness significantly affects patient outcome, recovery, and the likelihood of a soldier's return to duty.<sup>16</sup>

Improved diagnostic capability is frequently thought to be as easy as ordering another laboratory test. However, our new doctrine states that laboratory "procedures are designed to support rapid RTD and evacuation efforts".<sup>17</sup> In reality this means that there is no lab available at unit level. Further, medical laboratory support will be available at division level only on an area basis for personnel not immediately engaged in armed conflict. Even then sophisticated and time-consuming procedures have been reduced to only those tests that can be conducted and evaluated during a patient's brief stay. Since they are further limited to manual procedures, only such tests as hematocrits, white blood cell count, urinalysis, and gram staining are planned. Laboratory activities in Mobil Army Surgical Hospital (MASH) supporting units in contact will be weighted toward blood type and cross-match procedures, complete blood counts, blood gases, electrolyte levels, and urinalyses.<sup>18</sup>

No modern physician can perform at his full capacity without laboratory support, but the Family Physician is the most effective specialist when confronted with such an environment. Civilian recruiters of the For Profit Civilian Health Care sector also state that Family Physicians are the most efficient primary care physicians. They base their opinion on the volume of patients treated and the limited laboratory and radiology resources required for them to make a diagnosis and initiate treatment. These attributes that industry values for their corporate bottom line are equally critical to the AMEDD's ability to support the force.

### Improve Evacuation Capability

Evacuation and medical regulation of the sick and wounded is an integral part of the health service support system. They are as important as the treatment itself--equal to a surgical procedure and essential to the eventual restoration of the soldier to battle. For this reason, evacuation and medical regulating are key links in the continuum of care. In order for these resources to be utilized to the maximum extent possible, medical regulating of patients starts as far forward as possible, where the initial decision for the patient is made by the [Family] Physician in the treatment team or treatment platoon.<sup>19</sup>

The additional training and experience of the Board Certified Family Physician is invaluable not only in the mass casualty situation, but in the deposition of any patient that presents himself for care.

A patient is evacuated by the most expedient mode of evacuation (air or ground), depending upon his condition and then he is assigned evacuation precedence (urgent, priority, or routine). Diagnosis is the key in both war and peace, but a wrong decision is unbelievably expensive in combat. If the decision underestimates the patient's severity, death or increased morbidity may occur. On the other hand, overestimating the severity of the patient's condition may deprive limited resources from another patient, unduly risk aircrews and equipment, or needlessly set in motion the most elaborate evacuation system in the world.

For example, an urgent patient category requires an air ambulance as the mode of choice. To reduce waiting time these Medical Evacuation (MEDEVAC) aircraft operate as far forward on the battlefield as the tactical situation permits. This increases their risk. Since purely MEDEVAC resources are so expensive, nonmedical air assets have the addition mission of augmenting peak casualty evacuation, which detracts from their primary mission. These Army short-haul assets feed into the Air Force system, which continues to grow in complexity and

cost. Tactical and strategic aeromedical evacuation issues are so complex that they require ongoing coordination between the Army and Air Force. This cooperative effort is necessary

to establish priority of aeromedical evacuation, airframe availability, aircrew density, availability of medical equipment, establishment of patient/materiel priority for backhaul planning, evacuation of more seriously ill but stabilized patients, and identification of requirements for mobile aeromedical staging facility (MASF) and aeromedical staging facility packages.<sup>20</sup>

The AMEDD can conserve these resources only by placing the most capably trained physician at the point where the patient enters the system. This is a fundamental principle of triage taught to every medical student; it doesn't change on the battlefield.

The Theater evacuation policy establishes, in number of days, the maximum period of noneffectiveness (hospitalization and convalescence) that patients may be held for treatment within the theater. Evacuation should be accomplished as soon as the treating physician determines that it will not aggravate the patient's disabilities or medical condition.<sup>21</sup>

This policy requires the most astute clinical judgments in the management of individual patients. The Intern trained physician has only one-third as much training as the residency trained Family Physician; intern training is no longer sufficient.

#### **ENHANCE SOLDIER CONFIDENCE AND MORALE**

The Army has spent billions of dollars over the last several years on programs to improve the quality of life for the soldier and his family. The AMEP was one component of that effort, because 1/3 of the issues of contention which surfaced during the formation of the Army's Quality of Life program were medical. This investment was made--not out of purely altruistic feelings--but to increase the

readiness of the force. The force is an empty shell without well-trained and highly motivated people. The Army has clearly demonstrated that in a volunteer organization, "people programs" are not only cost effective, but essential. The long-predicted decline in the number of available young men for military service will see the years of successful recruiting for the all-volunteer force in jeopardy. Overcoming retention problems will require innovative programs to improve military life and to meet the needs of families of older, more senior members.<sup>22</sup> The Board Certified Family Physician has the skills and experience to provide the best care available, keep pace with the civilian standard of care, and reduce the frustrations of patients in their dealings with the system.

#### Provide The Best Care Available

Residency training is now the state of the art in the ambulatory care field. The AMA has recently issued a policy stating that two years of post medical school training should be the minimum requirement for physician licensure. Indications are that DOD would be given a waiver if this policy should become mandatory, since one year post medical school is the length of the current DOD Internship. However, DOD and the Army would then be in the defacto position of providing substandard care. The Army would then be in an untenable position in court when trying to defend a malpractice case. Their case would be equally untenable in the minds of families whose sons and daughters are exposed to high risk for the sake of the nation.

#### Keep Pace With The Civilian Standard Of Care

During World War II (WW II) the intern-trained physician met the civilian standard for care. This was simply because so few speciality residencies existed then. They

were developed primarily after the war as a consequence of the rapid expansion of medical knowledge and technology. That trend has continued to the point that there are now over forty speciality boards in the AMEDD structure alone. The intern trained physician (our GMO) is thus proportionally less able than his WW II counterpart.

#### Reduce Frustration In Dealing With The Bureaucracy

"The real question facing the all-volunteer effort is not whether the required quantity of manpower can be recruited, but whether the required quantity with the required qualities can be enticed to join", Mark J. Eitelberg observes in his report on the country's demographic trends.<sup>23</sup> Readiness is the critical issue during peace or "between wars". In a volunteer organization retention is the key to success. Since medical care occupies a major portion of the soldier's perception of his Quality of Life in the Army, the AMEDD must reduce the frustration level of its patients.

The administrative abilities taught to Family Practice residents are honed in clinics located primarily in Europe. They are required across the system of primary care. The capability to run an efficient clinic does not depend simply upon medical expertise. The knowledge and managerial ability to run a complicated system is required as well. Also someone must be willing to straighten out the problems when they occur. The experience, the added rank, the desire, and the ability to consult as an equal directly with speciality consultants, whether in a MEDCEN or theater hospital, many times makes the difference between success or failure. It is the critical difference between a quick phone call or message as opposed to the patient or the system having to spend days or weeks getting the answer. The

payoff is demonstrated daily in Europe, and the same principles apply to the combat environment.

### INCREASE UNIT COHESIVENESS

The Army is devoting tremendous resources to maintain unit integrity; COHORT (Cohesion, Operational Readiness, and Training) units are but one example. The Medical Department must support that effort. As I have already stated, the number of DNBI casualties will be between 7 and 8 of 10 patients, depending on the battlefield scenarios. This means that the requirement for primary care physicians is the most important physician requirement in maintaining unit integrity. They keep the soldier in the unit and out of the theater replacement depot more than any other specialty.

#### Keep The Soldier In The Unit

Having the Family Physician "just over the hill" (within 2 kilometers or 30 minutes doctrinally) means a quantum jump in accessibility and capability; he can offer more timely diagnosis with less mortality and morbidity. Less time is lost from the unit. In technical terms, the medical noneffective rate or the time that a soldier is "excused from duty for medical reasons" is markedly reduced. The impact on the unit is even better than one would anticipate from historical documents, because these sources do not include time off for clinic visits, consultations, and days off for illness unless hospitalization was required.<sup>24</sup>

#### Keep The Soldier Out Of The Theater Replacement Depots

Return to Duty Soldiers provide field commanders with a combat multiplier by filling replacement requisitions on the battlefield with battle conditioned veterans. When returned to their original unit of assignments,

these soldiers maintain unit cohesion and enhance the commander's ability to fight. The Return to Duty individual is already trained and acquainted with the unit's standard operating procedures, which results in a reduction in time needed to develop unit identification and cohesion. Cohesive units have fewer casualties and are more combat effective.<sup>25</sup>

With fewer consultations for diagnosis and treatment and fewer evacuations to theater hospitals, the number of soldiers that are inevitably lost from their unit will be reduced. Evacuation requires transportation, which means either using scarce MEDEVAC assets, unit vehicles, or resorting to methods of opportunity (the soldier takes responsibility for getting to the hospital). When the unit's assets are used for patient transportation, both combat equipment and personnel resources are lost. But at least the patient is more likely to be able to return to the unit. If methods of opportunity are used, the patient generally loses contact with his unit and ends up in a theater replacement depot.

#### INCREASE MEDICAL SYSTEM FLEXIBILITY

In a mobilizing environment (whether full mobilization or not), specific resources inevitably become scarce. Flexibility becomes critically important. This is especially true in planning for medical personnel requirements, because normally "there is little tangible, definitive information available to the planner early in a planning sequence. The planner may only know of major combatant elements, a general operational area, and perhaps the mission of the force and its expected duration".<sup>26</sup> The AMEDD must therefore build the maximum amount of flexibility into its structure to insure that it has the best administrative and leadership capability possible before mobilization is required.

### Critical Specialty Expertise

The AMEDD must plan for a military force that already "is the most senior in the postwar period".<sup>27</sup> There are currently 34,658 Army service members between the age of 41 and 50, and 2,127 are 50 and over.<sup>28</sup> This trend is projected to continue, because while the pool of adolescents is decreasing due to persistently low birth rates, one in five persons will be elderly by the year 2030. That is twice the proportion today, because life expectancy has increased from 47 years for Americans born in 1900 to 74.5 years for newborns in 1984.<sup>29</sup>

Increasing age brings more complicated acute illnesses and more chronic diseases. To protect the Army's investment "as older, more experienced people are used to fill vacancies in the supply of younger manpower", sophisticated methods of treatment are being required.<sup>30</sup> Diagnostic equipment is growing more complex, more precise, and more expensive. For example, the Nuclear Magnetic Resonance Scanner (NMR) costs around \$4 million. Topping the list of expensive procedures are organ transplants that until recently were considered experimental. The replacement of diseased or damaged organs--especially the heart, liver, pancreas, and kidney--with live tissue has become common, although the costs for a procedure soar into the tens of thousands of dollars. It is no wonder that health care remains the fourth largest item in the federal budget after national defense, interest on the national debt, and income security programs.<sup>31</sup>

These demographic and technological changes present the AMEDD with difficult choices, especially since health services are labor intensive and are likely to remain so for many years. Very few activities in the health-care field lend themselves to substitution of machines for people. This is especially true for the

interface between the patient and the health-care system.<sup>32</sup> The decision to improve primary care capabilities has been justified in part on the basis of freeing other specialty and subspecialty staff for more complex cases.

During the four years that I was the Ambulatory Care Consultant to TSG, I asked Family Practice staff how many consults they averaged per month to General Internists. The answer was surprising--generally less than one per year. One reason for this low rate is that Family Physicians spend an even larger portion of their residency in medicine rotations than they do in surgical ones (see page 15). Another reason is that the Internist does not have the lab, x-ray, or support he needs for more extensive workups. The same pattern will be true in a theater of operations to an even greater extent.

Within individual units flexibility is as important as it is in the system at large. In our deployed hospitals the primary care physicians have always been used as the "float", so they have been shifted from ERs to wards to pre-op or post-op, etc, depending on the workload or need at the moment. Residency trained primary care physicians offer genuine expertise not presently available in GMOs. Family Physicians spend from 34% to 38% of their residency in surgical rotations. That training prepares them to assist in the operating room and to relieve General Surgeons and Orthopods in pre-op, post-op, and on the wards when the need arises.

The assignment of Pediatricians to Vietnam points out another area of weakness in GMOs and highlights the advantages Family Practice flexibility brings to the Army.

Pediatrician assignment to Vietnam was prompted by the establishment of the CWCP (Civilian War Casualty Program). MACV (Military Assistance Command, Vietnam) Directive Number 40-14 (MACV-66, sec. 3a) stated: "Vietnamese civilians injured by an instrumentality of the Armed Forces of

the United States are authorized complete emergency care, including hospitalization when necessary. Care is authorized to be continued until the patient's condition is stabilized sufficiently to permit discharge or transfer to a civilian hospital, or to a civilian facility for convalescences." The U.S. Army was thus directed to develop a program of care for civilian casualties, estimated at 50,000 yearly. In 1967, a temporary allocation of 300 beds in USARV hospitals was made for this purpose. Three Army hospitals, with a bed capacity of 1,100 were then designated for the care of Vietnamese civilians.<sup>33</sup>

Here we see a graphic example of the diversity of skills and capabilities that are required in a combat zone. It is so easy to think only of 19 year old WIA casualties and forget about the 50 year old Commanders (MacArthur was 65 when he assumed command of the US Armed Forces, Pacific (AFPAC) during WW II). In addition there are the local national Very Important Persons (VIPs), and the masses of non-VIP civilian war casualties, including the very old and the very young. These examples are valid not only in Low Intensity Conflict (LIC), but they are a fact of life in High Intensity Conflict as well. The Army can no longer afford to have a major portion of its physician resources tied up in GMOs when proven Family Practice capabilities are within reach.

#### Increase Administrative And Leadership Capability

The Army only recently became aware of the value in Family Physicians in remote primary care settings. Indeed the Family Physicians provide more advantages than were anticipated. The first advantage--one that was expected--was that the medical aspects of patient care were handled with ease. This facilitated case disposition and decreased referrals. These are significant gains. In Europe, for example, the distances to the US hospitals, the difficulty in communication, conflicts with unit schedules, and the long appointment backlogs created delays seeing in patients that ranged from 6 months to 1 year! This created malpractice, untoward outcomes, and a nightmare for unit commanders.

The second advantage--which did come as a surprise--was the degree of improvement in the overall function of the clinic. Residency trained physicians, undaunted by the clinical aspect of health care alone, threw themselves into the leadership and management of their clinic. They began to rediscover the forgotten arts in the delivery of primary care in the Army. Primary Care physician turbulence decreased dramatically because after having completed residency training, the Family Physician was at last in his own element, whether as commander, OIC, or staff. Even if he did feel an urge to move to a hospital after a year or two to freshen his inpatient skills, his wife and family generally were more than content to remain for the three year tour without another move. This stability contrasted dramatically with the yearly turnover that was routine with a young GMO, because of the upward pressure for residency training. Of course if the GMO did not PCS (Permanent Change of Station) back to CONUS (Continental United States) after one year, it generally wasn't good news for the community, because it usually meant that he wasn't competitive enough to be selected.

In those clinics where Family Physicians were assigned, a predictable pattern emerged. Administrative procedures improved, morale turned around, and lab equipment began to appear. Just as in the case of Family Practice Division Surgeons, OERs reflected their performance. So this group found themselves with early promotions and selection for residency faculty positions. Their influence in the residencies accelerated the Family Practice residents' acceptance of the responsibility for all of the Army's primary care patients.

## IMPROVE QUALITY OF CARE

Vietnam WIA statistics seem impressive when compared with those of WW II. They are so good that most of the Army and the nation offer thanks to the AMEDD and turn their critical attention to other areas. The credit, however, goes primarily to the rapid evacuation of patients to Army hospitals made possible by short flight times and total air superiority.

In reality, the primary care picture was not so bright. The following official evaluations are not complimentary:

In general, the medical education of the unit surgeon did not prepare him for the myriad skin diseases, diarrheal syndromes, fevers, and other problems. Despite the excellent efforts in the field units, many difficulties arose in diagnosis and triage of patients whose illnesses were severe or prolonged. Often patients were held for an inordinate time in outlying units before transfer. Statistics will never reveal the number of days lost when officers and enlisted personnel were first held out of duty for a few days for skin disease, fever, or other causes, and then hospitalized at units or clearing companies for further therapy.<sup>34</sup>

The key phrase in these reports is "medical education". The only way to improve the quality of care delivered by the present GMO is with additional education. The only cost-effective and sustainable method for providing that education is by residency training. Family Practice residency training meets the requirements and brings with it the advantages in expertise, organization, and research inherent in the nation's largest medical specialty.<sup>35</sup>

The Family Physician is trained to meet the needs of approximately 85% of the patients who report to primary care facilities. During peacetime that percentage increases for Army service members and their family members to 96%. GMOs historically average approximately 20% referral rates for their service member patients alone, while PAs on the other hand refer between 14 and 32%.<sup>36</sup> Of those

who require additional attention, many simply need consultation. The Family Physician is able to manage most such patients. For the remainder, the Family Physician is trained to make timely and effective referrals to higher levels of care.

The impact of high numbers of consultations in the theater is vividly described by BG. Ognibene . . .

As outpatient consultations increased, the pressure on Internists to maintain an active inpatient service was overwhelming in view of the limited staffing. Severe stress was also placed on the air evacuation system since helicopters ferried patients back and forth from field units to hospitals for the consultations. Many consultations could have been handled by doctor-to-doctor communication between hospital units and the field medical units they supported had it been available. Proper triage technique is critical for effective care.<sup>37</sup>

#### PROVIDE FORWARD FEMALE PATIENT CAPABILITY

##### Female Soldiers Are Filling Critical Positions

The most recent DOD figures on female personnel (December 1986) show that there are 11,436 or 10.1% female officers in the Army and 71,343 or 10.6% enlisted service members. The Air Force contains the highest number of female soldier among all the services: 11.5% officers and 12.4% enlisted. The Navy contains 10.1% female officers and 9.1% enlisted. The Marine Corps contains the fewest number of females, as might be expected; but even they have 3.3% officers and 5.1% enlisted.<sup>38</sup> Since the combat exclusion policy prevents females from being assigned to direct combat units, females soldiers form a disproportionate share of Combat Service Support and Combat Support units. Many Corps--such as Communications, Intelligence, and Medical--have units with over 60% female members. Many female soldiers perform in an outstanding manner. But through sheer numbers alone, they are critical to the Army.

### National Demographics

Many believe that the American people will accept higher taxes to support defense before they will agree to a return to a peacetime draft. In fact, some analysts feel that the impending decline in the number of recruitable males means efforts will be made to get more women into combat support jobs and bring more minorities into the military. All of this means military manpower officials must assign women to more roles, "leading first to expanded opportunities for women in combat support jobs, and then to a complete removal of the ban on assigning women to combat."<sup>39</sup> These potential patients have different medical needs than the male soldier has.

Nine of the "309" wartime hospital diagnoses are female specific.<sup>40</sup> Four or 44% of these conditions are amenable to outpatient treatment and RTD. GMOs and PAs are able to diagnose and treat only a portion of the patients in one of these ailments. The Family Physician has that capability. Of more concern, however, is the large volume of female outpatient gynecological conditions. The Family Physician can care for over 85% of these patients. Good Data is not available for GMO referral rates, but informed sources state that their female service member referral rates are twice that for males.<sup>41</sup> So as the Army relies more and more on female personnel; the greater will be the Army's need for Family Physicians to support them.

### INCREASE MEDICAL SYSTEM EFFICIENCY

One cannot overstate the extreme lethality of modern land warfare, assured by the ever-expanding capability for target acquisition and target destruction with consequent widespread personnel casualties and equipment attrition in short periods of time. . . . We must accord the Soviets, at least in warfare on the Eurasian landmass, a distinct advantage in protracted, high-attrition warfare.<sup>42</sup>

This all means military planners are going to have to find ways to do more with less.<sup>43</sup>

The need for efficiency is not limited to the high intensity NATO conflict. The LIC environment should be considered "low" in intensity only when compared to the massive destruction of a war in NATO. It requires different capabilities, but ones that are just as highly developed if success is to be obtained. "A credible land combat capability for rapid deployment and quick in-country results with minimum civilian and military casualties is therefore a crucial factor if intervention is to be politically feasible."<sup>44</sup> The Family Physician provides the Army with the widest range of expertise at a higher level of proficiency than any other specialty in the world today to meet its needs.

#### Increase Productivity Of Forward Units

The AMEDD has been working intensely for the past 5 years designing a better system: Modifying theater hospital designs, changing evacuation paths, incorporating new equipment, and restructuring personnel. These changes should increase productivity and efficiency. The best way, however, is to replace a less capable soldier with a more capable one. This principle worked not only for the Infantry Branch, when a Ranger replaced a Rifleman in the Light Infantry Divisions (LID) to improve its combat capabilities, but also for the AMEDD in primary care. A residency trained primary care physician represents a tremendous increase in skill level, which translates into battlefield capability and productivity.

The advantages to the TO&E units are as follows: BDE Surgeon authorizations call for 0-4 General Medical Officers, however, in our system the only 0-4 GMOs

available are those who were unqualified or unacceptable for residency training. They are thus not generally competitive for promotions and career advancement. Replacing them with board certified physicians solves these problems and others without an endstrength increase.

Residency graduates complete their training generally as captains with 2 years remaining in grade before entering the 0-4 primary zone at the current promotion rates. There are a few exceptions--such as when GMOs with 1-2 years in the field are accepted for residency--but the numbers are small. Then they make 0-4 at their first duty assignment. They are 2-3 years more mature, and they have a good working knowledge of the "real" Army. As Family Practice residents, they are graduates of training programs closely associated with TO&E units. This relationship was established specifically to develop a better understanding of the soldier's environment and the stresses that he must cope with. Another important benefit for the TO&E unit parallels that of the clinic commander in Europe. That is, the Board Certified Family Physician can be expected to remain in that assignment for a normal tour (3 years), which is a tremendous improvement in the 1 year norm for GMOs.

Once again as in European Command positions, routine peacetime medical issues are not threatening to Family Physicians with their level of training. This places them in the position to devote time and energy to the supervision of Bn. PAs, training of the medical corpsmen, and training of the medical platoon. There is time to become emeshed in the role and functions of a medical staff officer--not only does he need to grow in the area of tactical operations and the medical support for it--he has a major responsibility to educate his commander in medical capabilities, limitations, dangers, and problems. Due to the complexity of the Combat Service

Support issues and the past weaknesses of the physicians in this area, medical issues have been downplayed in Wargaming, Field Training Exercises (FTX), and Command Post Exercises (CPX). It should not be surprising then, that most combat arms officers have a very weak knowledge in this area of their profession.

In peacetime, the Family Physician provides considerable care for unit families. The Family Physician has the professional credentials for privileges at the local hospital, and he is willing to use them. Over the years attempts at several MEDDACs to encourage GMD BDE Surgeons to utilize the hospital in other than a duty rooster role have never been successful. They just do not have the credentials that warrant sufficient privileges to make it practical and they don't have the self assurance to operate in an environment of specialists.

#### Increase Productivity Of Hospitals

Theater Army hospitals are neither designed nor staffed to provide outpatient care. Yet our experience in combat clearly demonstrates that GMDs cannot provide the required care either.

In addition to out-of-country evacuation, a flexible in-country medical evacuation system was required. With the development of the type (helicopter) of in-country transportation, significant traffic in outpatient consultation began in 1968, reaching its peak in the later years of the war. Unfortunately, neither evacuation hospitals nor field hospitals were constructed or staffed to render significant care to outpatients.<sup>45</sup>

Army peacetime hospital based capacity is increasingly strained because the total Health Care Beneficiary population continues to increase. The Army alone has 776,425 active duty soldiers and 1,150,400 dependents as of 30 September, 1986. The DOD total is over 8 million.<sup>46</sup> With this mounting demand for services, a condition of chronic overload is again developing. Unfortunately, many

improvements in the delivery of services that could be developed in the name of increased efficiency are likely to be perceived by patients as detractions from personalized care.<sup>47</sup> For example, patients' perceptions of centralized screening clinics in the AMIC area outweighs the benefits of any increased efficiency to the AMEDD. They would be unhappy because

the duration of both the initial waiting time and the total processing time is very important to patients. Often they are in pain and feeling anxious. They view their delay in treatment as a basic indicator of the sensitivity and responsiveness on the part of health professionals. Furthermore, they want a sense of unlimited time availability to solve their problems. When patients receive less than 10 minutes of uninterrupted private conversation with the physician, they feel that they are being treated in an impersonal manner.<sup>48</sup>

The Family Physician provides a solution for both of these situations. The low Family Practice referral rate allows theater hospital resources to concentrate on the inpatients that they have been designed to care for. During peacetime delivering care in settings outside the hospital "unloads it" or decreases crowding. Clinics also have a lower unit cost, lower capital requirement, lower operating cost, lower overhead, generally a better location, and frequently more convenient hours. They offer the added benefit of "smallness" since "inconvenience and depersonalization for the patient always increase after a certain scale of operation is reached in one building".<sup>49</sup>

Family Physicians structure their health care delivery in such a manner that patients are able to see the same physician or small team of physicians. Each patient represents a fairly unique combination of allergic sensitivity, unhealthy living habits, disease history, social role responsibilities, and socioeconomic variables.<sup>50</sup> Seeing the same patient repetitively, the Family Physician builds up a considerable data base on each patient and can do an effective and efficient job of

providing care at acceptable levels of quality and cost. Yet Family Physicians operate an efficient clinic because this data base is built up over many 10-15 minute appointments with the patient and other family members. They have many opportunities to see the patient, not necessarily because there is a serious illness involved, but because the Family Physician provides such a wide range of services: routine physical examinations for Dad; immunizations and well baby exams; treatment for colds and ear infections for the younger children; sports physicals and orthopedic injuries for teenagers; pap smears and breast exams for Mom; plus the acute illnesses that occasionally occur in every family. All of these requirements provide an ample opportunity to formulate a detailed medical history that is available when more serious illnesses or injuries occur. Best of all, patients like having their own Doctor. Most of them "do not feel their needs are adequately met by a sequence of referrals with separate waiting lines and transportation events".<sup>51</sup>

Over the past 20 years, the nation's health-related expenditures have risen almost tenfold, from about \$39 billion in 1965 to \$321 billion in 1983. In recent years, hospitals have taken up an increasing portion of the expenditures. In a dramatic effort to reduce these costs, Congress in March 1983 passed the Medicare prospective payment bill. It identifies 467 Diagnoses Related Groups (DRGs), or categories of diseases and their treatments. Medicare will then reimburse the hospital only for the amount that the government has agreed to pay for the patient's DRG (which is generally the diagnosis that most closely corresponds to his most severe ailment or that is most expensive to treat).<sup>52</sup>

This reimbursement plan has dramatically reduced the rate of increase in health expenditures. It has done so by shifting workload from the more expensive hospital

setting the the outpatient arena. Congress has directed the the DRG methodology be employed in DOD by 1988. The AMEP's primary care initiative will dramatically improve the Army's ability to implement this directive.

#### CHAPTER IV

#### CONCLUSION

Physicians with Family Practice training who have been oriented to the Army's special requirements contribute greatly to the Army's battlefield proficiency and peacetime welfare. They enhance the AMEDD's mobilization capabilities. They can considerably increase RTDs and thus sustain foxhole strength and keep medical facilities accessible to those most in need of care. RTDs as well contribute to unit cohesiveness. They have improved force morale both within the Medical Corps and throughout the Army by developing the means to provide timely, courteous service to soldiers and dependents alike. They offer more kinds of services, both clinical and managerial, at lower levels in the organization; so they contribute to organizational flexibility. They can routinely provide for many special needs of female soldiers, who themselves are increasingly critical to the force.

So Family Physicians have begun to make substantial contribution to the AMEDD. Even so, the Army has only slowly accomodated itself to recruiting and effectively using Family Physicians. Change is slow. Also, the Family Physician's three-year residency--as opposed to the GMO's one-year internship--strains the AMEDD's student personnel account. Likewise, fewer GMOs now seek residency training in other specialties. But a fortunate decline in civilian residencies means more civilian interns are seeking high quality Army residency training programs. Without

doubt, the Army gains from using Family Physicians far outweigh the problems of change and longer training time.

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## APPENDIX I

### Family Practice Authorizations

The total endstrength objective for Family Practice (FP) was 885, which would provide a physician for every AD member and their family at the ratio of 600 families or 2400 individuals per physician. This was the planning figure only! It recognized that local circumstances would require modifications. TO&E physicians, with their PAs and organic corpsmen, could care for an increased number of patients as a team. On the other hand, TDA physicians would care for less total patients since they would have more retirees and their families. This translates into more inpatients and therefore less outpatient productivity.

5% of the 885 Family Practice authorizations were set aside for Internal Medicine (IM), and 1% for Pediatrics (Ped). This new endstrength would enable these specialties to move out of the hospital environment and demonstrate their Go-To-War ambulatory care capability, without decreasing their inpatient load. It would provide a painless way for them to reenter ambulatory care as their civilian counterparts had been doing for some time. It also was an attempt at team building among the primary care specialists and an effort to improve the morale of the older specialties.

The 6% authorizations in Internal Medicine and Pediatrics took some of the pressure off recruiting Family Physicians. Without doubt, these new positions were to be utilized in clinics, i.e., non-hospital locations. Otherwise, the authorizations were to be returned to Family Practice.

At this point the big problem was how to fill the authorizations. AMEDD Graduate Medical Education (GME) had grown to the point that increases for any reason were unacceptable. In addition Family Practice applicants in the Army were sufficient only to support the current training allocations, 45 per year. Applications were accepted from active duty Army physicians only due to the fear of exceeding endstrength ceilings. This was a new phenomenon, occurring for the first time since Vietnam or the end of the draft. The recruiting goal was finally established at 45 per year to stay within endstrength projections and to give the recruiters a reasonable chance at success, since they had not been actively recruiting Family Physicians. It would also prepare them for the 49 per year that the PIDIP yearly endstrength growth would call for by 1988.

The 288 new authorizations (including FP, IM, and PED) were distributed to Europe (60), Korea (2), FORSCOM (54), and HSC (179). This distribution was based on input from these MEDCOMS and MACOMs on their requirements and their personnel constraints. For example, Europe would have liked more, but their allocation was constrained by Congressionally mandated troop strength levels.

## APPENDIX 2

### Battle Casualty Definitions

Wounded in action (WIA): All battle casualties who have incurred a traumatism or injury due to an external agent or cause. The term covers all wounds and other injuries incurred in action: Piercing (penetrating or perforating) wounds; Contused (without a break in the skin) wounds; Fractures; Burns; Blast concussions; Effects of gases and chemical warfare agents; and Effects of exposure to radioactive substances

Patients: Only those personnel who have been admitted to hospitals and who cannot be returned to duty within the same calendar day. They are reported to TSG in one of three major categories: disease (DIS), nonbattle injury (NBI), or battle casualty (battle injury [BI] or wounded in action). When a patient is admitted for unrelated conditions such as disease and nonbattle injury, the most serious condition is cited as the main cause of initial admission. This primary cause determines the classification. When a patient is admitted for several related conditions, the first condition incurred is used as the primary cause of admission. This condition governs the classification of the patient.

Disease (DIS): Patients other than those with battle injury and wounded in action and nonbattle injury cases are classified as disease cases. Patients suffering from mental disorders developed under battle conditions are classified as disease patients, not casualties.

Nonbattle injury (NBI): All traumatisms are classified as nonbattle injury except old traumatisms (as defined above) or battle condition of ill health caused by an

external agent. It includes conditions resulting from acute poisonings (even though taken internally) and from nonbacterial poisons. Injuries due to the elements (such as frostbite and immersion injury) are considered to be nonbattle injuries even when incurred in combat areas.

Died of wounds received in action (DOW): Battle casualties who die of wounds or other injuries received in action after having reached any Medical Treatment Facility (MTF). These cases differ from battle casualties who are found dead or who die before reaching a MTF (the KIA group). The decisive criterion is that they reach a MTF while still alive. All cases counted as DOW received in action are also counted as WIA.

Killed in action (KIA): Battle casualties who are killed outright or who die of wounds or other injuries before reaching any MTF.

Battle casualty: Any person lost to his organization because he is killed, wounded, missing, captured, or interned if such a loss is incurred in action.

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